

DRAFT VERSION
(Intended for Discussion Purposes Only)

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

**DRAFT MONITORING AND REPORTING PROGRAM NO. R9-2014-TENT FOR THE
MONITORING OF COMMERCIAL AGRICULTURAL AND NURSERY OPERATIONS
WITHIN THE SAN DIEGO REGION**

A. FINDINGS

The California Regional Water Quality Control Board, San Diego Region (hereinafter San Diego Water Board), finds that:

1. **LEGAL AND REGULATORY AUTHORITY:** This Monitoring and Reporting Program (MRP) Order conforms to and implements policies and requirements of the Porter-Cologne Water Quality Control Act (Division 7, commencing with Water Code section 13000) including (1) section 13267; (2) applicable State and federal regulations; (3) all applicable provisions of statewide Water Quality Control Plans adopted by the State Water Resources Control Board (State Water Board) and the *Water Quality Control Plan for the San Diego Basin* (Basin Plan) adopted by the San Diego Water Board including beneficial uses, water quality objectives, and implementation plans; (4) State Water Board policies and regulations, including State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*, Resolution No. 88-63, *Sources of Drinking Water*; the *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality*; California Code Regulations Title (Calif. Code Regs. title) 23, and (5) relevant standards, criteria, and advisories adopted by other State and federal agencies.
2. **PURPOSE.** This MRP is necessary to determine compliance with the *General Waste Discharge Requirements for Discharges from Commercial Agricultural and Nursery Operations within the San Diego Region, Order No. R9-2014-TENT* (Order No. R9-2014-TENT), and assess the potential impacts to, and quality of, surface waters within the San Diego Region. This MRP prescribes performance standards to evaluate the protection of water quality and protection of beneficial uses of surface waters within the San Diego Region.
3. **DISCHARGER.** “Discharger” is as defined in Finding No. A.3 of Order No. R9-2014-TENT. In accordance with Reporting Specifications, section I.4 of Order No. R9-2014-TENT, individual Dischargers enrolled in Order No. R9-2014-TENT are responsible for compliance with this MRP, unless the San Diego Water Board has issued the Discharger separate monitoring and reporting requirements to address site-specific conditions.
4. **MONITORING GROUP.** “Monitoring Group” is as defined in Finding No. A.5 of Order No. R9-2014-TENT.
5. **BASIS FOR SURFACE WATER MONITORING.** The performance of watershed-based monitoring will enable the San Diego Water Board to effectively assess Discharger compliance with Order No. R9-2014-TENT, this MRP, and the

applicable discharge limits adopted as Total Maximum Daily Loads (TMDLs) for Rainbow Creek Nitrogen and Phosphorus and Twenty Beaches and Project I Indicator Bacteria.

6. **NEED FOR SURFACE WATER MONITORING.** Discharges from lands used for agricultural or nursery operations (Operations) can be significant sources of sediment, dissolved solids, nutrients, pesticides, hydrocarbons, pathogens (i.e., bacteria, viruses, protozoa), and other pollutants. Those discharges can adversely affect the quality of waters of the State if irrigation return flows, and storm water runoff from Operations are not properly managed.

The federal Clean Water Act (CWA) section 303(d)(1)(A) requires that the San Diego Water Board maintain a list of impaired water bodies,¹ including several of which are located within or downstream from agricultural land use areas and that are impaired by one or more of the pollutants specified above. Existing regional TMDLs for such impaired waters are referenced in Table 1 of Finding No. A.11 in Order No. R9-2014-TENT.

Water Code section 13267 authorizes the San Diego Water Board to require individual, group, or watershed-based monitoring, to establish waste discharge requirements (WDRs) and review the adequacy and effectiveness of those WDRs. In order to assess compliance by the Dischargers with Order No. R9-2014-TENT and adopted TMDLs,² this MRP requires individual or group watershed-based monitoring within the San Diego Region.

7. **BASIS FOR REQUIRING TECHNICAL AND MONITORING REPORTS.** Water Code section 13267 allows the San Diego Water Board to require that Dischargers furnish technical and monitoring reports provided that the burden, including costs, of these reports bears a reasonable relationship to the need for, and the benefits to be obtained from, the reports. In requiring those reports, the San Diego Water Board must provide the person with a written explanation with regards to the need for reports, and must identify the evidence that supports requiring the person to provide the reports.
8. **NEED FOR TECHNICAL AND MONITORING REPORTS.** The technical and monitoring reports required by this MRP are needed to ensure that Dischargers enrolled in Order No. R9-2014-TENT implement effective best management practices and a watershed-based water quality monitoring program to ensure long-term protection of the quality and beneficial uses of the surface waters within the San Diego Region. The burden of providing the required reports bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.
9. **CALIFORNIA ENVIRONMENTAL QUALITY ACT.** In accordance with the requirements of the California Environmental Quality Act (CEQA), promulgated in

¹ The priority list of impaired water bodies is called the Clean Water Act Section 303(d) List of Water Quality Limited Segments, is commonly referred to as the 303(d) List. The 2008 California 303(d) List of Category 5 Water Quality Limited Segments for **Commercial** Agricultural and Nursery Operations within the San Diego Region is presented in Appendix D of Order No. R9-2014-TENT.

² TMDLs are identified in Finding No. A.11 of Order No. R9-2014-TENT.

Calif. Code Regs. title 14, section 15000 et seq., the San Diego Water Board is the lead agency for this project and has adopted a negative declaration for the project.

IT IS HEREBY ORDERED, that, pursuant to Water Code section 13267, all Dischargers enrolled in Order No. R9-2014-TENT must comply with the following requirements

B. REPORTING REQUIREMENTS.

1. All reports submitted to the San Diego Water Board for compliance with Order No. R9-2014-TENT must be developed in accordance with the requirements specified in Order No. R9-2014-TENT and this MRP. Annual reports required to be submitted to the San Diego Water Board, as described in Reporting Requirements, section B.7 of this MRP, may be submitted under a single cover.
2. **Water Quality Management Report.** Dischargers must submit an annual Water Quality Management Report containing the following information:
 - a. a completed *Annual Self Inspection Survey*, provided in Appendix B of Order No. R9-2014-TENT;
 - b. proof (e.g., certificate of completion) of the Dischargers participation in annual water quality management training, as required pursuant to Education Specifications, section D of Order No. R9-2014-TENT; and
 - c. a complete annual self-assessment to identify the pollutants present on the site and to assess the potential for runoff and/or infiltration to adversely affect the quality or beneficial uses of the waters of the State. Self-assessment questionnaires are available from the University of California Cooperative Extension (UCCE).³

Dischargers participating in a Monitoring Group⁴ must collectively submit their individual *Water Quality Management Reports* to the San Diego Water Board.

3. **Enrollment Report.** Dischargers participating in a Monitoring Group must collectively (i.e., the Monitoring Group may act on behalf of the membership) maintain a searchable database, listing all members participating in the Monitoring Group. The *Enrollment Report* must include the information specified in Enrollment Procedures, section C.3 of Order No. R9-2014-TENT. Dischargers may, as an alternative to submitting the annual *Enrollment Report*, develop and maintain a searchable database, that is accessible⁵ via the internet by the San Diego Water Board, listing all members participating in the Monitoring Group, and the Discharger information specified in Enrollment Procedures, section C.3 of Order No. R9-2014-TENT.

³ http://ucanr.edu/sites/agwaterquality/Grower_Resources/

⁴ Dischargers participating in a Monitoring Group are responsible for ensuring all reports are submitted to the San Diego Water Board.

⁵ San Diego Water Board access to internet databases must include a minimum of reading and downloading rights.

4. **Watershed Monitoring Report.** Dischargers⁶ must submit an annual *Watershed Monitoring Report* containing the following minimum information.
- a. A list of monitoring stations sampled during the reporting period and their respective global positioning system (GPS) coordinates.
 - b. A brief description of the land uses located within a 500 meter swath,⁷ on either side of the monitoring station, which includes, but may not be limited to:
 - i. the types of land uses (e.g., agricultural, open space, residential, industrial, etc.),
 - ii. the percentages of each type of land use encountered (e.g., agricultural, open space, etc.), and
 - iii. the types of activities found within each agricultural land use area (e.g., fruit tree orchards, vineyards, floral green houses, etc.).
 - c. A topographic map (or copy of an aerial photograph), at an appropriate scale, identifying the Dischargers irrigated property footprint.
 - d. The laboratory testing and monitoring equipment detection limits for each applicable monitoring parameter specified in Monitoring Specifications, Tables 4 and 5, section C.4 of this MRP.
 - e. The measured concentration of each monitoring parameter specified in Monitoring Specifications, Tables 4 and 5, section C.4 of this MRP, for each monitoring stations, during the current reporting period.
 - f. A brief description of the method (including date and time) of each surface water measurement, surface water sample, and quality assurance/control (QA/QC) procedures used, at each monitoring station.
 - g. A copy of the field logs used during the sampling of each monitoring station during the reporting period. Field logs for each monitoring station must, at a minimum, include:
 - i. the monitoring station identification number, and corresponding GPS coordinates;
 - ii. the sampling date, time, and methods used;
 - iii. the names and signatures of field personnel; and
 - iv. the method of monitoring each field parameter, and calibration of each piece of equipment used to monitor the field parameters specified in Monitoring Specifications, Table 5, section C.4 of this MRP.
 - h. A comprehensive summary of each monitoring station's analytical data obtained during the current and previous reporting periods, as specified in Reporting Requirements, Table 1, section B.7 of this MRP. Comprehensive

⁶ Dischargers may form a group/coalition to comply with the requirement specified in Order No. R9-214-TENT, and divide the costs of monitoring and reporting amongst its members.

⁷ The 500 meters must be oriented perpendicular to the stream channel in order to identify the land uses adjacent to the stream channel and monitoring stations.

- summaries must present the analytical data in both a tabular and graphical format.⁸ The analytical data must be provided electronically on compact disks (CD) or other media, and in a Excel compatible format or portable document format (PDF);
- i. A written summary of the monitoring results for each monitoring station within the Discharger's monitoring network. Written summaries must include, but may not be limited to:
 - i. the identification and discussion of any significant changes made or observed since the previous annual *Watershed Monitoring Report*;
 - ii. the identification and discussion of trends, or other information, that may indicate a potential change in the biological and/or hydrogeologic conditions within the watershed over the entire monitoring record; and
 - iii. the discussion of activities planned (including a schedule for completion) for the next annual reporting period.
5. **Monitoring and Reporting Program and Quality Assurance Project Plans.** Dischargers, with or without an existing approved *Monitoring and Reporting Program Plan and/or Quality Assurance Project Plan* (MRPP/QAPP), must submit a "one-time" MRPP/QAPP to incorporate the requirements specified in this MRP, as required by the Reporting Schedule outlined in Reporting Requirements, Table 1, section B.7 of this MRP. Dischargers may also be required to submit a revised MRPP/QAPP to address changes made to Order No. R9-2014-TENT or this MRP, by the San Diego Water Board or its Executive Officer.
6. **Watershed Monitoring Network Addenda.** Dischargers must submit the *Watershed Monitoring Network Addenda* to the San Diego Water Board in accordance with Reporting Requirements, Table 1, section B.7 of this MRP. The *Watershed Monitoring Network Addenda* will serve as an addendum to the Dischargers' MRPP/QAPP, to address implementation of the monitoring requirements contained within this MRP, for the watersheds specified in Monitoring Specifications, Table 2, section C.1.b of this MRP. The first *Watershed Monitoring Network Addendum* (for the San Luis Rey Hydrologic Unit) must be submitted with the Dischargers' MRPPs/QAPPs, in accordance with Reporting Requirements, sections B.5 and B.7 of this MRP. All subsequent *Watershed Monitoring Network Addenda* must be submitted in the year preceding the implementation of the monitoring and reporting requirements specified in this MRP, for the watersheds specified in Monitoring Specifications, Table 2, section C.1.b of this MRP (e.g., the *Watershed Monitoring Network Addendum for the Santa Margarita Hydrologic Unit* is due October 1, 2019).
7. **Reporting Schedule.** Reports must be received by the San Diego Water Board no later than 5:00 pm on or before the due date specified in Reporting Requirements, Table 1, section B.7 of this MRP.

⁸ Graphical plotting the concentration of one or more monitoring parameters on a semi-log scale.

Table 1: Reporting Schedule

Report Type	Frequency	Period	Due Date
Water Quality Management Report	Annual	Oct. 1 – Sept. 30	Oct. 30
Enrollment Report	Annual	Oct. 1 – Sept. 30	Oct. 30
Watershed Monitoring Report	Annual	Oct. 1 – Sept. 30	Oct. 30
MRPPs and QAPPs	Once		Apr. 1 ⁹
Watershed Monitoring Addenda	Every 5 Years		Oct. 1

8. STANDARD REPORTING REQUIREMENTS

- a. **Submission Procedures.** Dischargers must submit all reports required under this MRP in a searchable, electronic, PDF, unless otherwise specified, to:

California Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108
Attn: Irrigated Agriculture Regulatory Program Manager

Larger documents shall be divided into separate files in logical places in the report to keep the file size under 150 megabytes. Dischargers must continue to provide a paper transmittal letter, a paper copy of all figures larger than 8.5 inches by 14 inches (legal size), and an electronic copy (on a CD or other appropriate media) of all reports to the San Diego Water Board. All correspondence and documents submitted to the San Diego Water Board must include the reference code "<staff name>" in the header or subject line, where "<staff name>" is the first initial and last name of the San Diego Water Board case manager.

- b. **Use of Licensed Professionals.** Dischargers must ensure that all necessary documents, plans, and/or reports, required under this MRP, are prepared under the direction of appropriately qualified licensed professionals. Business and Professions Codes sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of licensed professionals. Dischargers shall include a statement of qualifications and license numbers, if applicable, of the responsible lead professionals in all plans and reports required under this MRP. The lead professional shall sign and affix their license stamp, as applicable, to the report, plan, or document.

⁹ MRPPs/QAPPs must be received by April 1, 2015. Dischargers not automatically enrolled, in accordance with Enrollments Procedures, section C.1 of Order No. R9-2014-TENT, must submit MRPPs/QAPPs to be received by the San Diego Water Board no later than April 1st in the year of enrollment in Order No. R9-2104-TENT, or as directed by the San Diego Water Board Executive Officer.

- c. **Transmittal Letter.** A letter summarizing the significant findings must be submitted with each report.
- i. The person signing the transmittal letter must make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or person who manages the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”
 - ii. All reports required by this MRP, and other information required by the San Diego Water Board must be signed and certified by a person designated as follows:
 - (1) For a corporation – by a principal executive officer of at least the level of vice president;
 - (2) For a partnership or sole proprietorship – by a general partner or the proprietor, respectively;
 - (3) *For a municipality, State, federal, or other public agency* – by either a principal executive officer or ranking elected official; and
 - (4) *For a military facility* – by the base commander to the person with overall responsibility for environmental matters in that branch of the military.
 - iii. All reports required by this MRP, and other information required by the San Diego Water Board may be signed and certified by a duly authorized representative of that person. An individual is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described in paragraph (a) of this section;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
 - (3) The written authorization is submitted to the San Diego Water Board.The authorization, in the form of a Signature Authority Statement, must be submitted to the San Diego Water Board within **30 days** from the:
 - (1) adoption of this Order; (2) enrollment under this Order; or (3) a change in duly authorized representative.

C. MONITORING SPECIFICATIONS

1. Standard Monitoring Provisions

- a. Dischargers must develop and submit a technically appropriate *MRPP/QAPP* and *Watershed Monitoring Network Addenda* that:
 - i. addresses the following regional monitoring framework questions for perennial streams and other surface water bodies (which directly or ultimately serve as receiving waters for agricultural and/or nursery operations) within the regions' watersheds:
 - (1) What are the conditions and trends of biological integrity and nutrient concentrations where agricultural and/or nursery operation related activities are the predominant land-use?
 - (2) How are the biological integrity and nutrient concentrations changing over time?
 - (3) What is the relationship between nutrient concentrations and benthos and/or algae communities?
 - ii. addresses the following regional monitoring framework questions for perennial streams, for which nutrient concentrations exceed the respective [Water Quality Objectives](#)¹⁰ and biological integrity is impaired, within the regions' watersheds:
 - (1) What is the extent and magnitude of nutrient-related water quality impacts or impairments?
 - (2) What are the main stressors, and are those main stressors associated with agricultural and/or nursery operation activities?
 - (3) What are the sources of the main stressors associated with agricultural and/or nursery operation activities?
 - (4) How effective are BMPs and MMs at removing pollutants identified at main stressors associated with agricultural and/or nursery operation activities?
 - (5) Is there an identifiable relationship between main stressors associated with agricultural and/or nursery operation activities and the type of, and/or intensity level of agriculture (e.g., green house crop production, fruit tree production, etc.)?
 - iii. addresses the following regional monitoring framework question for ephemeral streams within the regions' watersheds:
 - (1) What are the conditions and trends of biological integrity and nutrient concentrations where agricultural and/or nursery operation activities are the dominant land use?

¹⁰ Chapter 3 – Water Quality Objectives, Water Quality Control Plan for the San Diego Basin.

- iv. considers all relevant existing water quality data, water quality monitoring programs conducted by other entities, and identifiable water quality data gaps;
 - v. implements, and evaluates compliance with, the monitoring requirements specified in Order No. R9-2014-TENT and this MRP;
 - vi. implements the requirements and protocols established in the State Water Boards' [Surface Water Ambient Monitoring Program \(SWAMP\) Quality Assurance Program Plan](#),¹¹ and
 - vii. assesses the potential impacts to, and quality of, surface waters within the San Diego Region.
- b. Dischargers must monitor and assess the surface waters within the San Diego Region that directly or ultimately serve as receiving waters in accordance with the rotating watershed monitoring schedule specified in Monitoring Specifications, Table 2, section C.1.b, and the other requirements specified in this MRP.

Table 2: Rotating Watershed Monitoring Schedule.

Monitoring Period	Watershed (Hydrologic Unit¹²)
Years 1 through 5 (Oct. 2015 – Sept. 2020)	San Luis Rey Hydrologic Unit
Years 6 through 10 (Oct. 2020 – Sept. 2025)	Santa Margarita Hydrologic Unit
Years 11 through 15 (Oct. 2025 – Sept. 2030)	San Dieguito Hydrologic Unit
Years 16 through 20 (Oct. 2030 – Sept. 2035)	Tijuana Hydrologic Unit
Years 21 through 25 (Oct. 2035 – Sept. 2040)	Carlsbad Hydrologic Unit
Years 26 through 30 (Oct. 2040 – Sept. 2045)	San Juan Hydrologic Unit
Years 31 through 35 (Oct. 2045 – Sept. 2050)	Peñasquitos Hydrologic Unit
Years 36 through 40 (Oct. 2050 – Sept. 2055)	San Diego Hydrologic Unit
Years 41 through 45 (Oct. 2055 – Sept. 2060)	Sweetwater Hydrologic Unit

¹¹ The State Water Boards' SWAMP Quality Assurance Plan is available online at www.waterboards.ca.gov/water_issues/programs/swamp/docs/qapp/qaprp082209.pdf

¹² Chapter 1 – Introduction, Regional Boundaries, Water Quality Control Plan for the San Diego Basin.

2. Monitoring Network Provisions

- a. Dischargers' *Watershed Monitoring Network Addenda* must perform the following tasks during the monitoring period specified for each watershed listed in Monitoring Specifications, Table 2, section C.1.b of this MRP:
 - i. establish a monitoring network containing the minimum number of monitoring stations specified in Monitoring Specifications, Table 3, section C.2.a of this MRP. The minimum number of monitoring stations shall be based on the number of Dischargers participating in a Monitoring Group (e.g., Dischargers participating in a Monitoring Groups with 600 members are required to establish a monitoring network with a minimum of 4 monitoring stations). Individual Dischargers must establish a monitoring network consisting of at least one monitoring station.
 - ii. evaluate the land uses adjacent to each proposed monitoring station contained within the monitoring network, and characterize the monitoring station as either "open space" or "agricultural" based on the following criteria.
 - (1) "Open Space" Land Use: Monitoring stations qualify as "open space" when greater than 50% of the land use within a 500 meter radius around the monitoring stations is designated by the responsible local planning agency as "open space".
 - (2) "Agricultural" Land Use: Monitoring stations qualify as "agricultural" when greater than 50% of the land use within a 500 meter radius around the monitoring stations is designated by the responsible local planning agency as "agricultural".
 - iii. establish a monitoring network containing the minimum number of "fixed" and "rotating" monitoring stations specified in Monitoring Specifications, Table 3, section C.2.a of this MRP. Monitoring stations are characterized as either "fixed" or "rotating" based on the following criteria:
 - (1) "Fixed" monitoring stations: should have a fixed location during the five-year monitoring period, and be capable of routine repetitive monitoring for trend evaluation.
 - (2) "Rotating" monitoring stations: should have a new location every year, and should never be revisited¹³ during the five-year monitoring period, to obtain spatially representative data.
 - iv. ensure all monitoring stations within the monitoring network are:
 - (1) adequate and appropriate to satisfy the monitoring requirements and provisions specified in Order No. R9-2014-TENT and this MRP;

¹³ A monitoring stations would be considered to be revisited, or a repeat monitoring stations if it is within one stream kilometer of a previous monitoring stations, within the targeted watershed.

- (2) adequate and appropriate to address the monitoring framework questions outline in Monitoring Specifications, section C.1.a of this MRP;
- (3) located where a valid written land access agreements has been executed; and
- (4) safe and provides reasonable accessibility for all necessary sampling personnel and equipment.

Table 3: Total Monitoring Stations per Monitoring Network and Distribution

No. of Enrollees	Total Min. No. of Stations	No. of Stations Required to Monitor:		No. Stations Required to be:	
		"Open Space" Land Use	"Agricultural" Land Use	Fixed	Rotating
≤ 100	1	-	1	1 ^a	-
101 - 500	2	1	1	1 ^b	1 ^a
501 - 1000	4	1	3	1 ^a	3 ^a
> 1000	6	2	4	1 ^b	4 ^a ; 1 ^b

a – Monitoring station must be characterized as "agricultural" land use;

b – Monitoring station must be characterized as "open space" land use

- b. Dischargers' *Watershed Monitoring Network Addenda* should attempt to locate each monitoring station within the monitoring network:
 - i. at the mouth of major or significant tributaries to major streams within the San Diego Region; and
 - ii. in close proximity to gauging stations owned and operated by the United States Geological Survey.
- c. Dischargers' *MRPP/QAPP* and *Watershed Monitoring Network Addenda* may consider the use of ephemeral streams, if sufficient water flow¹⁴ is present during the dry-weather sampling period, as specified in Monitoring Specifications, Table 6, section C.5 of this MRP.
- d. Dischargers' monitoring stations used for dry-weather monitoring, should also be used for wet-weather monitoring (as specified in Monitoring Specifications, Table 6, section C.5 of this MRP), unless otherwise approved in writing by the San Diego Water Board Executive Officer.

3. Monitoring Procedures

- a. Dischargers must collect all required water quality and bioassessment (algae and benthic macro-invertebrate) samples in accordance with the State Water Board SWAMP protocols.¹⁵

¹⁴ Sufficient water flow means surface flow persists for sufficient duration to allow establishment of benthic macro-invertebrate communities and are sufficient to operate a d-frame net.

¹⁵ Available on line at

- b. Dischargers must notify the San Diego Water Board at least **14 days** prior to initiating sample collection activities.
- c. Dischargers must adhere to the following dry-weather and wet-weather monitoring requirements:
 - i. Dry-weather monitoring:
 - (1) Dry-weather monitoring must include, but may not be limited to the sampling and analysis of each monitoring station within a monitoring network for the bioassessment monitoring parameters, and water quality monitoring parameters, as specified in Monitoring Specifications, Tables 4 and 5, section C.4 of this MRP.
 - (2) Dry-weather monitoring must be performed annually during the “dry-season”, specified in Monitoring Specifications, Table 6, section C.5 of this MRP.
 - (3) Dry-weather sampling activities must not be performed within 72 hours following any storm event generating precipitation greater than 0.1 inch within a 24-hour period, during the “dry-season”, specified in Monitoring Specifications, Table 6, section C.5 of this MRP.
 - ii. Wet-weather monitoring:
 - (1) Wet-weather monitoring must include, but may not be limited to the sampling and analysis of each monitoring stations within a monitoring network for the water quality monitoring parameters, as specified in Monitoring Specifications, Table 5, in section C.4 of this MRP.
 - (2) Wet-weather monitoring must be performed annually during the “wet-season”, as specified in Monitoring Specifications, Table 6, section C.5 of this MRP.
 - (3) Wet-weather sampling activities (grab or flow-weighted) must be collected within 72 hours following the first qualifying storm event during the “wet-season,” as specified in Monitoring Specifications, Table 6, section C.5 of this MRP.

4. Watershed Monitoring Parameters

- a. Dischargers must, in accordance with the requirements and provisions specified in this MRP, sample and analyze each monitoring station with a monitoring network for the bioassessment monitoring parameters (Table 4) and water quality monitoring parameters (Table 5) listed below.

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- http://swamp.mpsl.mlml.calstate.edu/wp-content/uploads/2009/04/swamp_sop_bioassessment_collection_020107.pdf ,
 - http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/bmi_lab_sop_final.pdf, and
 - http://swamp.mpsl.mlml.calstate.edu/wp-content/uploads/2010/06/SWAMP_SOP_Algae_Field_Collection_050110.pdf

Table 4: Bioassessment Monitoring Parameters

Monitoring Parameters¹⁶		Units
Algae	Algae, Soft community assessment - Lab Work	
	Algae, Diatoms community assessment - Lab Work	
Benthic	Benthic Macro-invertebrate Bioassessment - Lab Work	
Physical Habitat	Percent algae cover	%
	Unshaded solar radiation	cal/(cm ² day)
	Flow velocity and volume	m/sec; m ³ /day
	Stream width and depth	m
	Percent canopy cover over the stream	%

Table 5: Water Quality Monitoring Parameters

Monitoring Parameters¹⁷		Units
Conventional	Flow velocity and volume	m/sec; m ³ /day
	Water temperature ^a	°C
	Dissolved Oxygen ^a	mg/L
	Conductivity	mS/cm
	pH ^a	
	Turbidity ^a	NTU
	Total Dissolved Solids (TDS)	mg/L
	Total Suspended Solids (TSS)	mg/L
Bacterial Related Parameters	Fecal Coliform	MPN/100mL
	Total Coliform	MPN/100mL
	Enterococcus bacteria	MPN/100mL
Nutrient Related Parameters	Nitrate as N (NO ₃)	mg/L
	Nitrite as N (NO ₂)	mg/L
	Nitrogen Total as N	mg/L
	Chloride	mg/L
	Sulfate	mg/L
	Ammonium as N	mg/L
	Particulate Nitrogen (PN)	mg/kg
	Soluble reactive Phosphorus (SRP)	mg/L
	Particulate phosphorus (PP)	mg/kg
	Total-P (TP)	mg/L

¹⁶ Bioassessment monitoring parameters are subject to change, pending the availability of new information, which may justify the removal or addition of parameters from Monitoring Specifications, Table 3, section C.4 of this MRP.

¹⁷ Water quality monitoring parameters are subject to change, pending the availability of new information, which may justify the removal or addition of parameters from Monitoring Specifications, Table 4, section C.4 of this MRP.

Table 5 (continued): Water Quality Monitoring Parameters

Monitoring Parameters ¹⁸		Units
Nutrient Related Parameters	Particulate organic carbon (POC)	mg/L
	Dissolved Organic Carbon	mg/L
	Chlorophyll-a	µg/L
	Algae Ash Free Dry Mass	g/m ²

a – Monitoring parameters to be quantified in both the field, during sampling, and the laboratory, during analytical analysis.

5. Monitoring Frequency

- a. Dischargers must, in accordance with the requirements and provisions specified in this MRP, sample and analyze each monitoring station within a monitoring network as specified in Table 6 below.

Table 6: Monitoring Frequency

Monitoring Season	Monitoring Frequency	Monitoring Period
Dry-Season (Bioassessment Monitoring)	Annual	June 1 – July 30
Dry-Season (Water Quality Monitoring)	Annual	June 1 – July 30
Wet-Season (Water Quality Monitoring)	Annual	October 1 – April 30

D. ALTERNATIVE MONITORING AND REPORTING

1. Dischargers having formed a Monitoring Group in accordance with the enrollment procedures specified in Enrollment Procedures, section C of Order No. R9-2014-TENT may, as an alternative to the monitoring and reporting requirements specified in Reporting Requirements, sections B.4, B.5, and B.6, and Monitoring Specifications, section C of this MRP, elect to participate as a member of the southern California Storm Water Monitoring Coalition (**SMC**).
2. Monitoring Groups which elect to participate as a member of the SMC must provide the San Diego Water Board with written notification within **30 days** of joining the SMC. Notification to the San Diego Water Board must include, but may not be limited to the following information:
 - a. a signed, written statement, by an authorized Monitoring Group representative, stating:

"The <Monitoring Group Name> is hereby providing notification to the California Regional Water Quality Control Board, San Diego Region, of its active membership with the southern California Storm Water Monitoring Coalition, effective <date>. The <Monitoring Group Name> understands its

¹⁸ Water quality monitoring parameters are subject to change, pending the availability of new information, which may justify the removal or addition of parameters from Monitoring Specifications, Table 4, section C.4 of this MRP.

participation in the southern California Storm Water Monitoring Coalition is a conditional alternative to the monitoring and reporting requirements specified in Reporting Requirements, sections B.4, B.5, and B.6 and Monitoring Specifications, section C of the Monitoring and Reporting Program No. R9-2014-TENT, provided the <Monitoring Group Name> remains in good-standing, and an actively participating member of the southern California Storm Water Monitoring Coalition. The <Monitoring Group> further acknowledges that participation in the southern California Storm Water Monitoring Coalition does not absolve the individual Dischargers (i.e., members of the <Monitoring Group Name>) from their obligation to wholly comply with all other requirements specified in Order No. R9-2014-TENT and Monitoring and Reporting Program No. R9-2014-TENT.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

- b. a copy of the Monitoring Groups' southern California Storm Water Monitoring Coalition membership confirmation; and
- c. a copy of the contact information for the individual(s) responsible for representing the Monitoring Group at all required southern California Storm Water Monitoring Coalition meetings and events.

E. PROVISIONS

1. **Enforcement Discretion.** The San Diego Water Board reserves its right to take any enforcement action authorized by law for violations of the terms and conditions of this MRP.
2. **Requesting Administrative Review by the State Water Board.** Any person affected by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320, and Calif. Code Regs. title 23, section 2050. The petition must be received by the State Water Board (Office of Chief Counsel, P.O. Box 100, Sacramento, CA 95812) within **30 days** of the date of adoption of this MRP. Copies of the law and regulations applicable to filing petitions will be provided upon request.
3. **Delegation of Authority.** The San Diego Water Board has delegated to the Executive Officer by resolution, all the powers and authority that may be delegated pursuant to Water Code section 13223. The San Diego Water Board intends for the Executive Officer to make modifications or revisions in appropriate cases, to this MRP. The Board further directs the Executive Officer to exercise discretion in determining whether proposed modifications and revisions should be considered for approval by the San Diego Water Board.

4. **Applicability.** This MRP must be implemented by all Dischargers subject to Order No. R9-2014-TENT, unless an individual MRP has been issued for the operation.

Ordered by: _____

David W. Gibson
Executive Officer